AIP Advances, 2015, vol.5, N2

Skeleton-supported stochastic networks of organic memristive devices: Adaptations and learning

Erokhina S., Sorokin V., Erokhin V.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015 Author(s). Stochastic networks of memristive devices were fabricated using a sponge as a skeleton material. Cyclic voltage-current characteristics, measured on the network, revealed properties, similar to the organic memristive device with deterministic architecture. Application of the external training resulted in the adaptation of the network electrical properties. The system revealed an improved stability with respect to the networks, composed from polymer fibers.

http://dx.doi.org/10.1063/1.4913374